

Title (en)

Variable length optical chamber and gas laser incorporating the same

Title (de)

Optische Kammer mit veränderbarer Länge und diese enthaltende Gaslaser

Title (fr)

Chambre optique à longueur variable et laser à gas la comprenant

Publication

EP 0851546 A2 19980701 (EN)

Application

EP 97118693 A 19971028

Priority

US 77302696 A 19961224

Abstract (en)

An optical chamber for use in a laser or other optical device includes a hollow container with holes at opposite ends. A fixed mirror is sealed to the housing and overlies one hole, whereas a movable mirror (42) is sealed to the housing by a flexible seal such as an O-ring (44) interposed between the mirror and the housing. A variable force actuator (46) such as a piezoelectric element biases the movable mirror (42) against the seal. By varying the force applied by the actuator, the movable mirror can be moved towards and away from the fixed mirror to vary the path length through the chamber. The chamber can provide a low cost tunable gas laser.

IPC 1-7

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